



## **UPPER MILK RIVER DRAINAGE**

### **PHYSICAL DESCRIPTION**

The Upper Milk River flows approximately 105 miles through Alberta before re-entering Montana in Hill County, approximately 34 miles upstream of the Fresno Reservoir headwaters. This section of the Milk River consists of badlands, native grasses, sagebrush, and shrub/forest landscapes located primarily on federal lands. The Upper Milk area encompasses approximately 2,100 square miles. Sage Creek is one of two major tributaries to the Milk River, flowing from the headwaters near the Sweetgrass Hills and coursing through Liberty and Hill counties approximately 60 miles southeast to the junction with Big Sandy Creek. Stream-side vegetation consists mainly of native grasses, rose, and sagebrush. Surrounding lands are privately owned pasture and cultivated croplands. Big Sandy Creek begins in the Bear Paw Mountains and flows approximately 52 miles northeast through Choteau and Hill counties to its confluence with the Milk River downstream of Fresno Reservoir. Surrounding lands consist of timbered mountains, prairie pastures, and cultivated croplands located on private lands and the Rocky Boy Indian Reservation.

There are numerous reservoirs constructed on ephemeral streams located throughout this area. Most of these reservoirs are too shallow for fisheries and are primarily used for stock water and irrigation. The largest reservoirs are Fresno and Bailey, both of which receive high fishing pressure and other recreational use. Fresno is managed as an irrigation storage facility by the BOR and experiences considerable annual water level drawdowns.

### **FISHERIES MANAGEMENT**

Fresno Reservoir is managed primarily for walleye. Management efforts are focused on working with the BOR on water-level management that benefits the resident fish community during critical spawning and rearing periods. Fresno Reservoir and the Milk River upstream of Fresno Dam supports a number of fish species including, walleye, yellow perch, lake whitefish, northern pike, black crappie, burbot, sauger, rainbow trout, stonecat, white sucker, longnose sucker, emerald shiner, spottail shiner, Rocky Mountain sculpin, fathead minnow, brook stickleback, lake chub, northern redbelly dace, longnose dace, western silvery minnow, and western silvery/plains minnow. Many of these species are also found in Sage and Big Sandy creeks. Species such as black bullhead, bluegill, smallmouth bass, largemouth bass, Iowa darter, and brassy minnow are found in the smaller impoundments and tributaries. Brook trout are found in the headwaters of Big Sandy Creek.

Fresno Reservoir has been stocked with 100,000 walleye fingerlings annually with little consideration given to wild walleye production, forage fish abundance and habitat quantity and quality. Stocking frequency and the number of walleye fingerlings planted are now being evaluated with the goal of improving walleye growth rates and size structure, while maintaining a favorable forage base. The forage base (yellow perch, black crappie, and spottail shiner) will be closely monitored with regard to current spawning success, water conditions, and predator densities.

Smaller reservoirs located throughout the area are managed for warm and cool water species diversity. Trapping and transport of warm-water species such as yellow perch, bluegill, black crappie, and fathead minnows will be implemented to establish new fisheries, promote kids fishing, and establish forage fish populations or to supplement existing game fish populations. Hatchery-reared rainbow trout, brook trout, and largemouth bass will continue to be stocked into those ponds with sufficient water depth and good overwinter survival. Ponds and reservoirs will be re-stocked immediately following severe drought events or winterkills if favorable habitat conditions exist. Windmill aeration systems will be maintained on those ponds with marginal depths and low winter dissolved oxygen levels.

Very little information has been obtained identifying species composition, densities, specific interactions, and habitat use of native and non-native fishes within the Milk River above Fresno Reservoir. Therefore, development and implementation of a standardized sampling program targeting multiple habitats is currently being developed.

Angling opportunities occur year-round, with anglers targeting the rivers and streams during the spring, shifting to the ponds and reservoirs from late spring through the winter months. Shore, boat, and ice fishing opportunities exist throughout the area, with anglers using a variety of methods to catch multiple species. Anglers need to be aware of the no live bait fish restriction on Fresno Reservoir and the Milk River above Fresno Reservoir.

## **HABITAT**

Flows on the Upper Milk River are highly variable and can range from intermittent pools (no flow) to flows exceeding 5,000 cfs depending on the time of year and precipitation. Flows are augmented annually through the transbasin diversion from the St. Mary River and canal system with up to 650 cfs during the irrigation season (April-September). Fresno Reservoir is a mainstem irrigation storage facility located on the Milk River with annual water fluctuations of more than 21 feet. Extreme reservoir drawdowns have negative impacts to the fishery and can result in poor spawning conditions, poor rearing habitat, poor overwinter water conditions, and increased fish entrainment downstream. Although uncommon, there have been years in which recreationists were unable to launch boats due to low reservoir water conditions.

Fish passage issues exist in the Upper Milk drainage, but little work has been done to identify these and determine passage enhancement opportunities. Plans are being developed to identify areas of impaired passage and implement safe water crossings which emphasize fish passage and habitat connectivity. Recommending best management practices for improving bank stabilization and riparian habitats, while opposing land use activities that further degrade habitat and water quality will be emphasized.

Riparian habitats associated with smaller reservoirs vary depending on rotational grazing plans and fencing. Water quality varies as well based on surrounding land use practices, water depth, and seasonal climate variables. Efforts are underway to work with land management agencies and private landowners to improve riparian health through a variety of treatments.

## **FISHING ACCESS**

The Upper Milk River is surrounded by federal lands, but access to those lands is limited. One access site is off a county road approximately 10 miles upstream of the Fresno Reservoir

headwaters. Access to Fresno Reservoir is good (primarily BOR ownership), with campgrounds provided and managed by the Fresno Chapter of Walleyes Unlimited, and primitive camping available throughout the lower half of the reservoir. There are two concrete boat ramps located near the dam and in Kremlin Bay.

Bailey Reservoir, a popular youth fishery and important regional fishery is the only State Fishing Access Site located in this area. Amenities at Bailey Reservoir include a fishing pier, pavilion, and boat ramp.

The FWP Region 6 pond guide will continue to be updated and distributed to anglers to increase awareness on local pond opportunities. Access and opportunity will continue to be a major emphasis throughout the area.

## **SPECIAL MANAGEMENT ISSUES**

### *Fishing Tournaments*

Currently, one open water walleye tournament and one ice fishing tournament are held on Fresno Reservoir annually. Tournament dates must be finalized with the BOR prior to completion of the permit application issued by MFWP. Tournaments will be reviewed on an individual basis. Evaluation of proposed tournaments will include potential biological and social impacts. Each tournament undergoes a 30-day public review and comment period. Tournament directors will be required to report post-tournament catch-rate information in a standardized format.

### *Milk River and Fresno Reservoir Water Management*

The St. Mary canal and existing infrastructure is approaching 100 years of age and is in need of major repairs. The St. Mary's Working Group is working on a plan to update and repair the existing infrastructure to ensure supplemental water continues to provide irrigation water to agricultural producers throughout the Milk River watershed. The BOR recently completed a transbasin water analysis study that identified potential climate change related impacts to the watershed. Anticipated impacts include highly variable water supplies that have the potential to limit all water uses over the next 40-year time period.

## FISHERIES MANAGEMENT DIRECTION FOR UPPER MILK RIVER DRAINAGE

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Milk River - Canadian border to Fresno Reservoir headwaters	34 miles	Walleye, Northern pike	Wild	General	Develop and implement a standardized sampling program.
		Sauger Burbot	Wild	General/Conservation	Develop and implement a standardized sampling program. Work with Alberta Sustainable Resource Development to collect sauger genetics in the upper Milk River.
		Native non-game fishes	Wild	Conservation	Develop and implement a standardized sampling program.
Habitat needs and activities: Identify current and historic habitat limitations as it pertains to winter flows, fish production, and rearing habitat. Work with the BOR, the local conservation district, and landowners to address any habitat issue identified.					
Fresno Reservoir	5,700 acres	Walleye, Northern pike, Yellow perch, Black crappie, Lake whitefish	Wild/Hatchery	General/Put-Grow-Take	Continue to evaluate and manage the fish community in regards to reservoir water management. Implement walleye and yellow perch stocking strategies based on water management and current population densities.
		Sauger, Burbot	Wild	General/Conservation	Monitor populations to detect changes in species composition and abundance.
Habitat needs and activities: Work with Bureau of Reclamation and water users to optimize water management in Fresno Reservoir to benefit the resident fisheries. Optimal water management should target steady to rising reservoir water levels during critical spawning periods (mid April-mid June). It should also target favorable overwinter pool elevations that submerge rock substrates and increase young of year rearing habitat.					
Big Sandy Creek	52 miles	Walleye, Northern pike, Yellow perch, Black bullhead	Wild	General	Begin to understand fish assemblage and population size of game fishes.
		Native non-game fishes	Wild	Conservation	Protect habitat and provide passage where applicable.
Habitat needs and activities: Identify habitat issues and work closely with local conservation districts, county road crews, and landowners to implement safe water crossings which emphasis fish passage and water connectivity.					
Sage Creek	60 miles	Northern pike, Yellow perch	Wild	General	Begin to understand fish assemblage and population size of game fishes.
		Native non-	Wild	Conservation	Protect habitat and provide passage where applicable.
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Water	Miles/acres	Species	Origin	Management Type	Management Direction
		game fishes			
Habitat needs and activities: Identify habitat issues and work closely with local conservation districts, county road crews, and landowners to implement safe water crossings which emphasis fish passage and water connectivity.					
Bailey Reservoir	70 acres	Northern pike, Yellow perch, Black crappie	Wild	General	
		Walleye	Hatchery	Put-Grow-Take	Stock 10,000 walleye fingerlings on alternate years.
Habitat needs and activities: Seek opportunities to increase reservoir habitat with use of artificial structures.					

